

Reference 10

Line Stage Preamplifier



In 2010, Audio Research announced the Reference Anniversary preamplifier, a special limited edition product commemorating our 40th anniversary. It was acclaimed by many as the finest preamplifier available and a fitting tribute to all of the classic Audio Research products that were introduced during the forty years that preceded it. That we would only accept new orders for this special product during the anniversary year surprised almost everyone, but we considered the limited time frame appropriate.

Since that time, we have learned a few things, and the result of that knowledge led to the development of the Reference 10. Included are critically chosen new components, proprietary custom-made capacitors, wiring, and new connectors that cumulatively provide a level of performance never before achieved. Key Audio Research design traits remain: The signal path is fully discrete, all-tube, pure Class-A, with zero feedback. Other attributes and choices remain, too: Each unit is completely hand-soldered and hand-constructed in our Minnesota facility using the finest materials, with major components such as custom transformers, plated-through circuit boards, and casework sourced locally. All engineering is performed in-house.

After the single 20A power cord, the Reference 10 is completely dual-mono from the power supply through the audio circuit. There are dual, separate low- and high-voltage transformers for each channel; there is dual-mono vacuum-tube regulation (one 6H30 and one 6550WE per channel), dual-mono audio circuits (four 6H30 per channel), and enough energy storage for a serious power amplifier.



Specifications

Frequency Response: +0 -3dB 0.1Hz to 200kHz at rated output. (BALANCED, 200k ohms load.)

Distortion: Less than .006% at 2V RMS Balanced output.

Gain: Main output (SE or BAL input): 12dB Balanced output, 6dB Single Ended output. Tape output: 0dB. (Processor input: 0dB Balanced)

Input Impedance: 120K ohms Balanced, 60K ohms SE, Inputs (7): 1, 2, 3, 4, 5, 6, PROCESSOR. (XLR and RCA connectors).

Output Impedance: 600 ohms Balanced, 300 ohms SE main (2), 20K ohms minimum load and 2000pF maximum capacitance. Outputs (3): 2 main, 1 tape (XLR and RCA connectors).

Output Polarity: Non inverting.

Maximum Input: 20V RMS maximum Balanced, (10V RMS SE).

Rated Outputs: 2V RMS (1V RMS SE) into 200K ohm balanced load (maximum balanced output capability is 30V RMS at less than 0.5% THD at 1kHz).

Crosstalk: -80dB or better at 1kHz.

Controls: Volume (104 steps). Push Buttons: Power, Mute, Interactive Touch Screen. Rear RS-232 control and IR input.

Power Supplies: Electronically regulated low and high voltage supplies. Automatic 40 sec. warm-up/brown-out mute. Line regulation better than .01%.

Noise: 1.7uV RMS residual IHF weighted balanced equivalent input noise with volume at 1 (109dB below 2V RMS output.)

Tube Complement: (8)-6H30P dual triodes, plus (2 each) 6550C and 6H30P in power supply.

Power Requirements: 100-135VAC 60Hz (200-20VAC 50/60Hz) 220 watts. Standby: 2.2 watts.

Dimensions: Width 19" (48 cm)
Height 7" (17.8 cm) (standard rack panel)
Depth 15.5" (39.4 cm)
Handles extend 1.5" (3.8 cm) forward of the front panels.

Weight:

Audio Chassis: 23.6 lbs. (10.7 kg) Net; 33.3 lbs. (15.1 kg) Shipping.

Power Supply Chassis: 37.65 lbs. (17.07 kg) Net; 47.35 lbs. (21.48 kg) Shipping.